



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

AUG 07 2012

Amy J. Siebert, P.E.
Commissioner
Town of Greenwich Department of Public Works
Town Hall
101 Field Point Road
Greenwich, Connecticut 06836-2540

Re: PCB Cleanup and Disposal Approval under 40 CFR §§ 761.61(a) and (c)
and § 761.79(h)
Byram Sewage Pumping Station
142 South Water Street, Greenwich, Connecticut

Dear Ms. Siebert:

This is in response to the Town of Greenwich Department of Public Works (the Town) Notification¹ for approval of a proposed PCB cleanup and disposal plan at the South Water Pump Station (also known as Byram Sewage Pumping Station, "the Site") located at 142 South Water Street in Greenwich, Connecticut. The Site contains PCB-contaminated materials that exceed the allowable PCB levels under 40 CFR § 761.20(a) and § 761.62. Specifically, PCBs have been found in paint on building surfaces and piping at the Site.

In its Notification, the Town is proposing the following PCB abatement activities:

- Decontaminate painted pipe in accordance with § 761.79(b)(3)(i)(B) for use, and dispose of paint in accordance with § 761.62(b);
- Remove all visible interior paint on *porous surfaces* (e.g. concrete, concrete masonry unit (CMU)) and dispose of in accordance with § 761.62(b);

¹ Information was submitted by AECOM on behalf of the Town to satisfy the notification requirement under 40 CFR § 761.61(a)(3) and (c). Information was provided dated July 10, 2012 (Building Materials Remedial Action Plan); July 30, 2012 (Response to EPA comments); and, August 3, 2012 (verbal clarification on piping removal and recycling). This information will be referred to as the "Notification".

- Encapsulate PCB-contaminated *porous surfaces* with 2 coats of an epoxy paint or equivalent product if the PCB cleanup standard of less than or equal to (\leq) 1 part per million (ppm) cannot be achieved; and,
- Record a notice on the deed and implement a long-term monitoring and maintenance plan for encapsulated surfaces if the \leq 1 ppm PCB cleanup standard cannot be achieved.

With the exception of the verification sampling frequency specified under § 761.61(a)(6), the Notification meets the requirements and standards established under §§ 761.61(a), 761.62, and 761.79 for cleanup and disposal of *PCB remediation waste* and *PCB bulk product waste*. However, given the nature of the contamination, the proposed sampling frequency appears reasonable to confirm if the PCB cleanup standard of \leq 1 ppm has been met and/or to confirm that encapsulation of the surfaces will be required. EPA finds that the proposed verification sampling frequency will not present an unreasonable risk to public health or the environment and may approve the alternative sampling under § 761.61(c).

Based on the EPA's review, the information provided in the Notification meets the requirements under § 761.62(a) and § 761.79(h) for abatement of PCB paint, under § 761.79(b)(3)(i) for abatement of painted *non-porous surfaces*, and under § 761.61(c) for encapsulation of PCB-contaminated *porous surfaces*. EPA finds that the proposed encapsulation of PCB-contaminated *porous surfaces* should effectively prevent direct exposure of these PCB-contaminated surfaces to building users, and that these activities will not result in an unreasonable risk to public health or to the environment provided the coatings are maintained. As such, EPA may approve the encapsulation under § 761.61(c).

The Town may proceed with its cleanup in accordance with 40 CFR §§ 761.61(a) and (c); § 761.62; § 761.79(h); its Notification; and this Approval, subject to the conditions of Attachment 1.

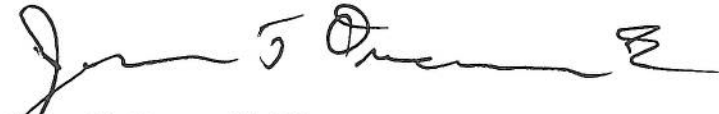
This Approval does not release the Town from any applicable requirements of federal, state or local law, including the requirements related to cleanup and disposal of PCBs or other contaminants under the Connecticut Department of Energy and Environmental Protection (CTDEEP) regulations.

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (OSRR07-2)
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527 / Facsimile: (617) 918-0527

EPA shall not consider the work authorized under this Approval to be complete until it has received all required submittals. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

A handwritten signature in black ink, appearing to read "James T. Owens III", with a stylized flourish at the end.

James T. Owens III, Director
Office of Site Remediation & Restoration

cc G. Trombly, CTDEEP
M. Beeler, AECOM
File

Attachment 1

ATTACHMENT 1:

**PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS
SOUTH WATER PUMP STATION (BYRAM SEWAGE PUMPING STATION)
142 SOUTH WATER STREET
GREENWICH, CONNECTICUT**

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and the *PCB remediation waste* identified in the Notification.
2. The Town of Greenwich (the Town) shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the cleanup and disposal plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. The Town must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, the Town shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.
6. The Town is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time the Town has or receives information indicating that The Town or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.
7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by the Town are authorized to conduct the activities set forth in the Notification. The Town is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.

8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release the Town from compliance with any applicable requirements of federal, state or local law; or 3) release the Town from liability for, or otherwise resolve, any violations of federal, state or local law.
9. Failure to comply with the Approval conditions specified herein shall constitute a violation of the requirement in § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR Part 761 Subpart D.

NOTIFICATION AND CERTIFICATION CONDITIONS

10. This Approval may be revoked if the EPA does not receive written notification from the Town of its acceptance of the conditions of this Approval within 10 business days of receipt.
11. The Town shall notify EPA in writing of the scheduled date of commencement of on-site activities at least 1 business day prior to conducting any work under this Approval.
12. Prior to initiation of work authorized under this Approval, the Town shall submit the following information for EPA review and/or approval:
 - a. a certification signed by its selected abatement contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval and in the contractor work plan provided in the Notification;
 - b. a contractor work plan, prepared and submitted by the selected abatement contractor(s) describing the means and methods for paint removal and the containment and air monitoring that will be employed during abatement activities. This work plan should also include information on how and where wastes will be stored and disposed of, and on how field equipment will be decontaminated; and,
 - c. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical method requirements and quality assurance requirements specified in the Notification and in this Approval.

CLEANUP AND DISPOSAL CONDITIONS

13. The Town shall ensure that the health and safety plan that has been developed for workers remains in effect until all work authorized under this Approval has been completed.

14. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools or construction of a negative air containment system with a HEPA ventilation system to control emissions, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.
15. PCB-contaminated *porous surfaces* (i.e., concrete masonry unit (CMU) and concrete) and *non-porous surfaces* (i.e., metal piping) shall be decontaminated and verification sampling and analysis shall be conducted as described below:
 - a. All visible residues of PCB paint (i.e. *PCB bulk product waste*) shall be removed from the surfaces as described in the Notification.
 - b. The cleanup standard for *non-porous surfaces* (i.e., metal pipe) for use shall be the NACE visual standard #2 as specified under § 761.79(b)(3)(i)(B).
 - i) In the event that the NACE 2 visual standard specified under § 761.79(b)(3)(i)(B) cannot be achieved for *non-porous surfaces*, surface wipe sampling may be conducted as specified in 40 CFR § 761.123 (i.e., $\mu\text{g}/100\text{ cm}^2$) and in accordance with 40 CFR § 761, Subpart P. Under this provision, the PCB cleanup standard shall be $\leq 10\text{ }\mu\text{g}/100\text{ cm}^2$.
 - ii) Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction/analytical method(s) is validated according to Subpart Q.
 - c. The cleanup standard for *porous surfaces* shall be less than or equal to (\leq) 1 part per million (ppm).
 - i) All post-cleanup verification sampling for *porous surfaces* shall be performed on a bulk basis (i.e., mg/kg) and reported on a dry weight analysis. Verification sampling for *porous surfaces* shall be conducted in accordance with the EPA Region 1 *Standard Operating Procedure For Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011*, at a maximum depth interval of 0.5 inches, and in accordance with the frequency specified in the Notification.
 - ii) Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction/analytical method(s) is validated according to Subpart Q.

- d. In the event **any** *porous surfaces* verification sample exceeds the PCB cleanup standard of 1 ppm, encapsulation of the *porous surfaces* shall be implemented as described in the Notification.
 - i) Following encapsulation of PCB-contaminated *porous surfaces*, post-encapsulation sampling shall be conducted to determine the effectiveness of the encapsulation.
 - ii) Surface wipe samples shall be collected from encapsulated surfaces. Wipe sampling shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e., $\mu\text{g}/100\text{ cm}^2$).
 - iii) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
 - iv) In the event that the PCB concentration in **any** surface wipe sample is greater than ($>$) $1\text{ }\mu\text{g}/100\text{ cm}^2$ and this standard cannot be achieved by application of additional coatings or encapsulants, the Town shall contact EPA for further discussion and direction on alternatives.
 - v) The Town shall record a notice on the deed and submit a monitoring and maintenance implementation plan (MMIP) for the encapsulated *porous surfaces* (see Conditions 17 and 18).
- 16. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.
 - a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
 - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
 - c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60(a).

DEED NOTICE AND USE CONDITIONS

17. If PCB concentrations > 1 ppm remain at the Site following abatement activities, the Town shall record a notice on the deed to document this fact. Within thirty (30) days of completing the activities described in the Notification and in the Approval, the Town shall submit for EPA review and approval, a draft deed notice for the Site. The deed notice shall include: a description of the extent and levels of contamination at the Site following abatement; a description of the actions taken at the Site; a description of the use restrictions for the Site, if applicable; and the long-term monitoring and maintenance requirements on the Site, which may be addressed in the monitoring and maintenance implementation plan (MMIP, see Condition 18). Within seven (7) days of receipt of EPA's approval of the draft deed notice, the Town shall record the deed notice and shall attach a copy of this Approval to the notice.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

18. Within thirty (30) days of completion of the work authorized under this Approval, the Town shall submit for EPA's review and approval, a detailed long-term monitoring and maintenance implementation plan (MMIP) for the surface encapsulants. The Town shall incorporate any changes to the MMIP required by EPA.
 - a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and reporting requirements.
 - b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users.
 - c. The Town shall submit the results of these long-term monitoring and maintenance activities to EPA. Based on its review of the results, EPA may determine that modification to the MMIP is necessary in order to monitor and/or evaluate the long-term effectiveness of the encapsulants.
 - d. Activities required under the MMIP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.
19. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

20. Any modification(s) in the plan, specifications, or information submitted by the Town, contained in the Notification, and forming the basis upon which this Approval has been issued, must receive prior written approval from the EPA. The Town shall inform the EPA of any modification, in writing, at least ten (10) days prior to such change. No action may be taken to implement any such modification unless the EPA has approved of the modification, in writing. The EPA may request additional information in order to determine whether to approve the modification. If such modification involves a change in the use of the Site, the EPA may revoke, suspend, and/or modify this Approval upon finding that this cleanup and disposal action may pose an unreasonable risk of injury to health or the environment due to the change in use. EPA may take similar action if the EPA does not receive requested information needed from the Town to make a determination regarding potential risk.
21. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
22. The Town shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by the Town to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.

RECORDKEEPING AND REPORTING CONDITIONS

23. The Town shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the cleanup and disposal and the analytical sampling shall be established and maintained by the Town in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
24. The Town shall submit a final report to the EPA within 60 days of completion of the activities authorized under this Approval. At a minimum, this final report shall include: a short narrative of the project activities, including photo documentation; the characterization and verification sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of; copies of manifests and bills of lading; and copies of certificates of disposal or similar certifications issued by the disposer. The report shall also include a copy of the recorded deed notice and a certification signed by a Town official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.

25. As required under Condition 18 of this Approval, the Town shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMIP to be approved by EPA.
26. Required submittals shall be mailed to:

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100 – (OSRR07-2)
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527
27. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

END OF ATTACHMENT 1